



July 22, 2005

Marlene H. Dortch  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, DC 20554

Re: ET Docket No 05-213

AMI Semiconductor's Comments in Support of Dexcom, Inc. Request for Waiver of the Frequency Monitoring Requirements of the Medical Implant Communications Service Rules

Dear Ms. Dortch,

AMI Semiconductor (AMIS) supports the waiver request submitted by Dexcom for relief from the frequency monitoring requirements of the Medical Implant Communication System ("MICS") rules. AMIS is a provider of application specific integrated circuits and standard products to the medical marketplace, including to Dexcom. We contribute to the design of solutions for a wide variety of medical implantable devices, each with its own unique set of challenges.

We believe Dexcom's implantable continuous glucose meter (CGM) technology provides significant medical benefits to diabetics. Continuous metering of glucose levels allows more accurate and comfortable monitoring of blood glucose levels. A more informed patient can therefore maintain more consistent and proper blood glucose levels that can reduce the serious long-term complications of diabetes.

Although AMIS, and other manufacturers, make integrated circuits that support listen before transmit (LBT), the availability of such circuits does not in itself signify that they are appropriate for every type of implantable device. For the Dexcom technology, continuous monitoring of glucose levels imposes demands on the battery that are inconsistent with LBT. Enforcing full compliance with LBT for Dexcom's implantable CGM device will reduce battery life significantly. Many functions can contribute to battery consumption for a typical implanted device. The key to obtaining appropriate battery life is to apportion the power among the various functions to be performed by the device. How this is accomplished is very dependent on the individual use of the implanted device. What is appropriate for one application may not be for another. We believe enforcement of the LBT requirement for Dexcom's implanted CGM would either require a much larger battery or more frequent surgeries to remove and re-implant. In either case the comfort of the patient may drop dramatically. It is very likely the net affect will be less adoption by the diabetic patient population and therefore less contribution to the public good. It is very unlikely, moreover, that the periodic transmission employed by the Dexcom device would present any life threatening medical events to other MICS devices. The combination of very low duty cycle, transmission time, and range should pose little risk of interference.

In conclusion, AMIS supports the request for waiver by Dexcom referred to in ET-Docket 05-213. We believe the unique Dexcom technology will contribute to the overall health of diabetes patients while posing little interference with to other applications in the MICS frequency bands.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Tong".

Robert Tong  
Senior Vice President, Medical and Wireless Products

• **AMI Semiconductor, Inc.**

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